Title (en)
   SOLENOID PUMP

Title (de)
   ELEKTROMAGNETPUMPE

Title (fr)
   POMPE À SOLÉNOÏDE

Publication
   EP 3690245 B1 20210818 (EN)

Application
   EP 20153884 A 20200127

Priority
   US 201916260741 A 20190129

Abstract (en)
   [origin: EP3690245A1] A solenoid pump (20) that includes a base (24) and a solenoid (22) having a coil (54) and a pole piece (56). A retainer body
   (114), positioned inside the solenoid (22) and the base (24), includes an armature cavity (117) that receives an armature (62) in a sliding fit for
   movement between energized and de-energized positions. A diaphragm (120), mounted in the armature cavity (117), is connected to the armature
   (62). An inlet check valve (125) permits fluid flow in only a first direction moving from an inlet port (30) toward the diaphragm (120). An outlet check
   valve (126) permits fluid flow in only a second direction moving from the diaphragm (120) toward an outlet port (32). A fluid flow path (131) extends
   through the retainer body (114) from the inlet check valve (125) to the diaphragm (120) and from the diaphragm (120) to the outlet check valve (126)
   for transporting fluid from the inlet check valve (125) to the outlet check valve (126) as the diaphragm (120) oscillates between first and second
   positions.

IPC 8 full level
   F04B 17/04 (2006.01); **F04B 43/04** (2006.01); **F04B 53/22** (2006.01)

CPC (source: CN EP KR US)
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   F04B 53/10 (2013.01 - KR); **F04B 53/106** (2013.01 - CN US); **F04B 53/22** (2013.01 - EP); **F16K 31/0675** (2013.01 - US);
   F16K 31/0693 (2013.01 - US); **H01F 7/16** (2013.01 - KR)

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